

March 8, 1961

Dr. C. N. Loesar
Department of Anatomy
Western Reserve University
School of Medicine
Cleveland, Ohio

Dear Doctor Loesar:

I am deeply intrigued by your report on television scanning micro-spectrophotometry which was published in Progress in Neurobiology in 1957. In fact, we had "rediscovered" the same principle for doing microspectrophotometry of bacteria and had started assembling some of the components when, as I should have done long before, I encountered your work. My colleagues and I would be very grateful to you for your publications on the instrumentation and its applications and, I hope, after we have been able to do our homework, that we can impose on you for some discussion of your experience. Our particular interest is in the identification of nucleic acids and proteins by their characteristic absorption peaks at 260 and 280 nm. Caspersson has run some samples for us on his machine in Stockholm and he is getting very interesting spectra that we would now like to generate with the high speed capabilities of the camera tube.

Except for your own work, and a paper by Gloersen in the October 1958 Journal of the Optical Society of America, I have not been able to find any comparable applications of line scan analysis for fast spectrometry. If you do know of any further developments, I would be grateful for the information.

Since we are mainly interested in the ultraviolet between 250 and 300 nm, we are deeply concerned about getting the most efficient pick-up tubes for this region. Have you run into anything that would compete with RCA's development in this field?

Yours sincerely,

Joshua Lederberg
Professor of Genetics

AC-SEN, C.M.